AMENDMENT TO THE SPECIFICATION

A. Page 8, Line 1:

Please replace the specification paragraph beginning on page 8, line 1 with the following:

The air handling subsystem 50 and exhaust system 70 may include components of a turbocharger (not shown) including a compressor which draws air through an inlet into a conduit of subsystem 50. Subsystem 50 may further include an aftercooler to cool air compressed by this compressor. For a turbocharger embodiment, exhaust subsystem [[50]] 70 can include a turbine powered by the exhaust stream to drive the compressor, and further may have a wastegate to selectively by-pass exhaust away from the turbine.

B. Page 11, Line 6:

Please replace the specification paragraph beginning on page 11, line 6 with the following:

Fig. 5 is a graph showing percent fueling on its vertical axis and engine speed on its horizontal axis. It defines a number of operating regions R1, R2, R3 and R4. A number of fueling values are indicated on the vertical axis: fueling offset, break maximum fueling (BMF), minimum fueling, and idle fueling. The LHMF ~~valve~~ value is selected from a fueling curve, comprised of two line segments: the fueling slope segment and the generally horizontal line segment labeled LMF (Lowest Maximum Fueling). These two line segments form the upper boundary of operating regions R1, R2 and R3 of the Fig. 5 graph. Idle speed

at the left-most extreme of regions on R1 and R4, and absolute maximum engine speed (ABS. MAX.) at the right most extreme region of R3 are found along the horizontal axis. Additionally, regions R1-R4 are shown within a 100% fueling curve that corresponds to nominal fueling limits of engine 30.

C. Page 22, Line 13:

Please replace the specification paragraph beginning on page 22, line 13 with the following:

Logic 300 also includes logical switches 309 and 310. Selector 308 provides the lesser of its two inputs to one input pole of switch 309 which represents the autozeroed values of signals S1 and S2 regardless of whether an out-of-range condition has occurred in connection with either one. Switch 309 also includes a second input pole of zero (0%) and toggle control input T that is determined by a logical constant ZTL. Switch 309 provides its output to one input pole of switch 310 and the other input pole of switch 310 is provided the output of switch 311. Switch [[311]] 310 has a toggle control input T provided from test logic 320. Test logic 320 outputs a true logic state only if signal CF produced by logic 260 is true and signal LIMPHOME produced by logic 245 is false. Switches 309 and 310 cooperate so that the output of switch 310 comes from switch 311 unless there is conformance failure without a limp-home indication. On the other hand, if CF is true and LIMPHOME is false, then switch 310 outputs the value provided by switch 309 as determined by the ZTL constant. Accordingly, if constant ZTL is true, it causes a zero value to be output by switch 310 if there is a conformance failure (CF=true) and no limp-home indication (LIMPHOME=false). If ZTL is false with CF=true and LIMPHOME=false, then the minimum value from selector

308 is output by switch 310. In this manner, constant ZTL can be used to determine whether values from sensor 224 and/or sensor 226 causing a conformance failure without a limp-home activation are to be relied upon.

D. Page 25, Line 15:

Please replace the paragraph beginning on page 25, line 15 with the following:

Logic subgrouping 700 includes adders 706, 710, and 714; and multiplier 708. The throttle minimum value for S2 (signal [[S1]] S2 TM) is calculated by logic subgrouping 700 as a function of signal S2, a sensor property autozero adjustment factor designated by signal AZ A, and a previously calculated value of S2 TM, which is designated signal S2 LM, in the same manner as described for signal S1 of logic grouping 500. Signal S2 LM is a stored value of S2 TM from the last execution of logic subgrouping 700, or an initialization value if there were no previous executions. Adder 706 subtracts signal [[S1]] S2 LM from signal [[S1]] S2 and provides the resulting difference to multiplier 708. Multiplier 708 multiplies this difference by the adjustment figure of signal AZ A and provides the resulting product to adder 710. Adder 710 adds the product from multiplier 708 and signal S2 LM, which sum becomes current S2 TM signal. Adder 714 adds signal S2 TM and constant AZO to provide the autozero signal S2 AZ used with previously described logic of Figs. 9 and 10. From logic subgrouping 700, operator 405 is encountered at which point logic 500 is exited.